



# International Observe the Moon Night

SEEING THE MOON... *in a whole new light*

2010 09.18.2010 09.18.2010 09.18.2010 09.18.2010



## **Brooke Hsu**

Lunar Reconnaissance Orbiter

Education and Public Outreach Lead

**2010 Lunar Science Forum**

**Moffet Field, CA**



## Purpose:

- Engage lunar science and education communities, partner networks, amateur astronomers, space enthusiasts, and general public in an annual lunar observation campaign that shares excitement of lunar science and exploration
- Enable public to maintain curiosity about the Moon and gain better understanding of Moon's formation, evolution, and place in night sky
- Give partners within and beyond NASA a meaningful event in which to communicate with their audiences about NASA science and ways to get involved



## Background:

- Building off last year's success at GSFC
  - Aug. 1 - "We're at the Moon!" celebrated LRO's successful insertion into lunar orbit
  - Over 700 attendees
- Building off last year's success at ARC/NLSI
  - Aug. 1 - "National Observe the Moon Night" as part of International Year of Astronomy (IYA)
  - Over 1000 attendees



## What's New for 2010:

- Theme: "Seeing the Moon... in a whole new light"
- Lunar Photography contest
- Tweet-ups (@observethemoon)
- Website: <http://observethemoonnight.org>
- InOMN kits: advertising materials, Moon observation journals, Moon maps



## Who - National Program Partners:

- Lunar Reconnaissance Orbiter Education and Public Outreach
- Marshall Space Flight Center
- Ames Research Center
- NASA Lunar Science Institute
- Lunar Planetary Institute
- The Astronomical Society of the Pacific
- The Mauna Kea Observatories Outreach Committee
- The Astronomers without Borders Group
- Bryce Canyon National Park



## Who - International Programs and Partners:

- The Astronomers without Borders International Volunteers
- The Gemini Observatory in Chile
- The Canadian Lunar Research Network (NLSI Node)
- European Planetary Science Conference (2010 LOC Rome)
- The Canadian IYA Committee (possibly CASCA)
- Greece, Afghanistan





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Image Credit: David Haworth

*The Moon as it appears on  
18 September 2010*

## LUNAR FEATURES

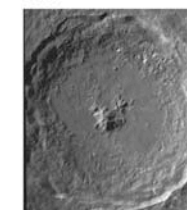
**Mare Frigoris:** Latin for "The Sea of Cold", Mare Frigoris is located in the outer rings of Oceanus Procellarum.

old, making it one of the younger craters on the Moon.

**Sinus Iridum:** Latin for "Bay of Rainbows," Sinus Iridum is one of the more popular lunar features for amateur astronomers due to its morphology.

**Kepler Crater:** Kepler's rays extend over 300 km from the crater - almost 10 times farther than the crater's 32 km diameter!

**Mare Imbrium:** At 1123 km across, Mare Imbrium is the second largest mare on the near side of the Moon.



**Tycho Crater:** Tycho is one of the most recognized craters on the Moon. Its fresh ejecta rays

span 1,500 km across the lunar surface.

**Mare Tranquillitatis:** The astronauts of Apollo 11 made history in the Sea of Tranquility: it was here they became the first humans to set foot on the Moon.



**Gassendi Crater:** Gassendi Crater was one of the areas considered for the Apollo 17 mission.

**Schiller Crater:** Schiller Crater is oblong in shape, making it different from most lunar craters.

**Mare Crisium:** Mare Crisium covers 176,000 square kilometers of the lunar surface, and is the location of the Soviet sample return mission Luna 24.

**Mare Serenitatis:** Apollo 17 astronauts landed near the eastern edge of the Sea of Serenity on December 17, 1972.

**Mare Nectaris:** The Sea of Nectar contains over twice as much basalt (87,000 cubic km) than the Big Island of Hawaii (35,000 cubic km).

**Copernicus Crater:** One of the most prominent craters on the lunar near side, Copernicus crater spans 93 km and is only about 800 million years

INTERNATIONAL OBSERVE THE MOON  
NIGHT IS SPONSORED BY:







## Website

<http://observethemoonnight.org>

- General info about InOMN
- Information about local InOMN events
- Moon info and activities
- Event-hosting tips
- InOMN kits
- Links to contests and social media
- InOMN merchandise



## Example InOMN Event

- Observing the Moon with telescopes
- Lunar Talk by a Local Expert
- Hands-on activities
- Tweet-up (#InOMN10)
- Refreshments
- Evaluations